



## SEQUENCE LISTING

RECEIVED

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TECH CENTER 1600/2900

<110> BROWNING, JEFFREY  
AMBROSE, CHRISTINE  
MACKAY, FABIENNE  
TSCHOPP, JURG  
SCHNEIDER, PASCAL

<120> BAFF, INHIBITORS THEREOF AND THEIR USE IN THE  
MODULATION OF B-CELL RESPONSE

<130> 08201.0024-01000

<140> 09/911,777

<141> 2001-07-24

<150> 60/143,228

<151> 2001-07-09

<150> PCT/US00/01788

<151> 2000-01-25

<150> 60/117,169

<151> 1999-01-25

<160> 28

<170> PatentIn Ver. 2.1

<210> 1

<211> 218

<212> PRT

<213> Homo sapiens

<400> 1

Met Asp Asp Ser Thr Glu Arg Glu Gln Ser Arg Leu Thr Ser Cys Leu  
1 5 10 15

Lys Lys Arg Glu Glu Met Lys Leu Lys Glu Cys Val Ser Ile Leu Pro  
20 25 30

Arg Lys Glu Ser Pro Ser Val Leu Leu Ser Cys Cys Leu Thr Val Val  
35 40 45

Ser Phe Tyr Gln Val Ala Ala Leu Gln Gly Asp Leu Ala Ser Leu Arg  
50 55 60

Ala Glu Leu Gln Gly His His Ala Glu Lys Leu Pro Ala Gly Ala Lys  
65 70 75 80

Ile Phe Glu Pro Pro Ala Pro Gly Glu Gly Asn Ser Ser Gln Asn Ser  
85 90 95

Arg Asn Lys Arg Ala Val Gln Gly Pro Glu Glu Thr Val Thr Gln Asp  
100 105 110

Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr Ile Gln Lys Gly

115	120	125
Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Ser Ala		
130	135	140
Leu Tyr Gly Gln Val Leu Tyr Thr Asp Lys Thr Tyr Ala Met Gly His		
145	150	155 160
Leu Ile Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu		
	165	170 175
Val Thr Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Leu		
	180	185 190
Gln Leu Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Leu Asp Gly Asp		
	195	200 205
Val Thr Phe Phe Gly Ala Leu Lys Leu Leu		
	210	215

<210> 2  
 <211> 232  
 <212> PRT  
 <213> Mus sp.

<400> 2

Met Asp Glu Ser Ala Lys Thr Leu Pro Pro Pro Cys Leu Cys Phe Cys
1 5 10 15
Ser Glu Lys Gly Glu Asp Met Lys Val Gly Tyr Asp Pro Ile Thr Pro
20 25 30
Gln Lys Glu Glu Gly Ala Val Leu Leu Ser Ser Ser Phe Thr Ala Met
35 40 45
Ser Leu Tyr Gln Leu Ala Ala Leu Gln Ala Asp Leu Met Asn Leu Arg
50 55 60
Met Glu Leu Gln Ser Tyr Arg Gly Ser Ala Thr Pro Ala Ala Ala Lys
65 70 75 80
Leu Leu Thr Pro Ala Ala Pro Arg Pro His Asn Ser Ser Arg Gly His
85 90 95
Arg Asn Arg Arg Ala Phe Pro Gly Pro Glu Glu Thr Glu Gln Asp Val
100 105 110
Asp Leu Ser Ala Pro Pro Ala Leu Arg Asn Ile Ile Gln Asp Cys Leu
115 120 125
Gln Leu Ile Ala Asp Ser Asp Thr Pro Thr Ile Arg Lys Gly Thr Tyr
130 135 140
Thr Phe Val Pro Trp Leu Leu Ser Phe Lys Arg Gly Asn Ala Leu Tyr
145 150 155 160

Ser Gln Val Leu Tyr Thr Asp Pro Ile Phe Ala Met Gly His Val Ile  
165 170 175

Gln Arg Lys Lys Val His Val Phe Gly Asp Glu Leu Ser Leu Val Thr  
180 185 190

Leu Phe Arg Cys Ile Gln Asn Leu Glu Glu Gly Asp Glu Ile Gln Leu  
195 200 205

Ala Ile Pro Arg Glu Asn Ala Gln Ile Ser Arg Asn Gly Asp Asp Thr  
210 215 220

Phe Phe Gly Ala Leu Lys Leu Leu  
225 230

<210> 3

<211> 102

<212> PRT

<213> Homo sapiens

<400> 3

Val Thr Gln Asp Cys Leu Gln Leu Ile Ala Asp Ser Glu Thr Pro Thr  
1 5 10 15

Ile Gln Lys Gly Ser Tyr Thr Phe Val Pro Trp Leu Leu Ser Phe Lys  
20 25 30

Arg Gly Ser Ala Leu Glu Glu Lys Tyr Gly Gln Val Leu Tyr Thr Asp  
35 40 45

Lys Thr Tyr Ala Met Gly His Leu Ile Gln Arg Lys Lys Val His Val  
50 55 60

Phe Gly Asp Glu Leu Ser Asn Asn Ser Cys Tyr Ser Ala Gly Ile Ala  
65 70 75 80

Lys Leu Glu Glu Gly Asp Glu Leu Gln Leu Ala Ile Pro Arg Glu Asn  
85 90 95

Ala Gln Ile Ser Leu Asp  
100

<210> 4

<211> 96

<212> PRT

<213> Homo sapiens

<400> 4

Lys Gln His Ser Val Leu His Leu Val Pro Ile Asn Ala Thr Ser Lys  
1 5 10 15

Asp Asp Ser Asp Val Thr Glu Val Met Trp Gln Pro Ala Leu Arg Arg  
20 25 30

Gly Arg Gly Leu Gln Ala Gln Tyr Ser Gln Val Leu Phe Gln Asp Val

35                      40                      45  
 Thr Phe Thr Met Gly Gln Val Val Ser Arg Glu Gly Gln Gly Arg Ala  
     50                      55                      60  
 Tyr Asn Ser Cys Tyr Ser Ala Gly Val Phe His Leu His Gln Gly Asp  
     65                      70                      75                      80  
 Ile Leu Ser Val Ile Ile Pro Arg Ala Arg Ala Lys Leu Asn Leu Ser  
                     85                      90                      95

<210> 5  
 <211> 104  
 <212> PRT  
 <213> Homo sapiens

<400> 5  
 Ser Asp Lys Pro Val Ala His Val Val Ala Asn Pro Gln Ala Glu Gly  
     1                      5                      10                      15  
 Gln Leu Gln Trp Leu Asn Arg Arg Ala Asn Ala Leu Leu Ala Asn Gly  
                     20                      25                      30  
 Val Tyr Ser Gln Val Leu Phe Lys Gly Gln Gly Cys Pro Ser Thr His  
                     35                      40                      45  
 Val Leu Leu Thr His Thr Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr  
                     50                      55                      60  
 Glu Gly Ala Glu Ala Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly  
     65                      70                      75                      80  
 Val Phe Gln Leu Glu Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg  
                     85                      90                      95  
 Pro Asp Tyr Leu Asp Phe Ala Glu  
                     100

<210> 6  
 <211> 97  
 <212> PRT  
 <213> Homo sapiens

<400> 6  
 Glu Leu Arg Lys Val Ala His Leu Thr Gly Lys Ser Asn Ser Arg Ser  
     1                      5                      10                      15  
 Met Pro Leu Glu Trp Glu Asp Thr Tyr Gly Ile Val Leu Leu Ser Gly  
                     20                      25                      30  
 Val Lys Tyr Ser Lys Val Tyr Phe Arg Gly Gln Ser Cys Asn Asn Leu  
                     35                      40                      45  
 Pro Leu Ser His Lys Val Tyr Met Arg Asn Ser Lys Tyr Pro Gln Met  
                     50                      55                      60

Trp Ala Arg Ser Ser Tyr Leu Gly Ala Val Phe Asn Leu Thr Ser Ala  
65 70 75 80

Asp His Leu Tyr Val Asn Val Ser Glu Leu Ser Leu Val Asn Phe Glu  
85 90 95

Glu

<210> 7

<211> 102

<212> PRT

<213> Homo sapiens

<400> 7

Thr Leu Lys Pro Ala Ala His Leu Ile Gly Asp Pro Ser Lys Gln Asn  
1 5 10 15

Ser Leu Leu Trp Arg Ala Asn Thr Asp Arg Ala Phe Leu Gln Asp Gly  
20 25 30

Phe Tyr Ser Gln Val Val Phe Ser Gly Lys Ala Tyr Ser Pro Lys Ala  
35 40 45

Thr Ser Ser Pro Leu Tyr Leu Ala His Glu Val Gln Leu Phe Ser Ser  
50 55 60

Gln Tyr Pro Phe Pro Trp Leu His Ser Met Tyr His Gly Ala Ala Phe  
65 70 75 80

Gln Leu Thr Gln Gly Asp Gln Leu Ser Thr His Thr Asp Gly Ile Pro  
85 90 95

His Leu Val Leu Ser Phe  
100

<210> 8

<211> 109

<212> PRT

<213> Homo sapiens

<400> 8

Glu Ala Gln Pro Phe Ala His Leu Thr Ile Asn Ala Thr Asp Ile Pro  
1 5 10 15

Ser Gly Ser His Lys Val Ser Leu Ser Ser Trp Tyr His Asp Arg Gly  
20 25 30

Trp Gly Lys Ile Ser Asn Met Tyr Ala Asn Ile Cys Phe Arg His His  
35 40 45

Glu Thr Ser Gly Asp Leu Ala Thr Glu Tyr Leu Gln Leu Met Val Tyr  
50 55 60

Val Thr Lys Thr Ser Ile Lys Ile Pro Ser Glu Phe His Phe Tyr Ser

65		70		75		80
Ile Asn Val Gly Gly Phe Phe Lys Leu Arg Ser Gly Glu Glu Ile Ser						
	85		90		95	

Ile Glu Val Ser Asn Pro Ser Leu Leu Asp Pro Asp Gln
100 105

<210> 9  
 <211> 26  
 <212> DNA  
 <213> Homo sapiens

<400> 9  
 actgtttctt ctggaccctg aacggc 26

<210> 10  
 <211> 30  
 <212> DNA  
 <213> Homo sapiens

<400> 10  
 gacaagcttg ccaccatgga tgactccaca 30

<210> 11  
 <211> 23  
 <212> DNA  
 <213> Homo sapiens

<400> 11  
 actagtcaca gcagtttcaa tgc 23

<210> 12  
 <211> 22  
 <212> DNA  
 <213> Homo sapiens

<400> 12  
 ctgcaagggtc cagaagaaac ag 22

<210> 13  
 <211> 24  
 <212> DNA  
 <213> Homo sapiens

<400> 13  
 ggagaaggca actccagtca gaac 24

<210> 14  
 <211> 24  
 <212> DNA

<213> Homo sapiens

<400> 14

caattcatcc ccaaagacat ggac

24

<210> 15

<211> 22

<212> DNA

<213> Homo sapiens

<400> 15

tcggaacaca acgaaacaag tc

22

<210> 16

<211> 26

<212> DNA

<213> Homo sapiens

<400> 16

cttctccttc acctggaaac tgactg

26

<210> 17

<211> 19

<212> DNA

<213> Homo sapiens

<400> 17

ggcatcgtga tggactccg

19

<210> 18

<211> 19

<212> DNA

<213> Homo sapiens

<400> 18

gctggaaggt ggacagcga

19

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<210> 19

<211> 35

<212> DNA

<213> Homo sapiens

<400> 19

taagaatgcg gccgcggaat ggatgagtct gcaaa

35

<210> 20

<211> 35

<212> DNA

<213> Homo sapiens

<400> 20

taagaatgcg gccgcgggat cacgcactcc agcaa

35

<210> 21

<211> 21

<212> DNA

<213> Homo sapiens

<400> 21

gcagtttcac agcgatgtcc t

21

<210> 22

<211> 21

<212> DNA

<213> Homo sapiens

<400> 22

gtctcgttg cgtgaaatct g

21

<210> 23

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative motif

<400> 23

Arg Asn Lys Arg

1

<210> 24

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative motif

<400> 24

Arg Lys Arg Arg

1

<210> 25

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Illustrative motif



<400> 25  
Arg Pro Arg Arg  
1

<210> 26  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence: Illustrative motif

<220>  
<221> MOD\_RES  
<222> (2)  
<223> Any amino acid

<220>  
<221> MOD\_RES  
<222> (3)  
<223> Lys or Arg

<400> 26  
Arg Xaa Xaa Arg  
1

<210> 27  
<211> 185  
<212> PRT  
<213> Human

<220>  
<221> MISC\_FEATURE  
<222> (46)..(46)  
<223> Insertion of alanine; splice variant

<400> 27

Met Arg Arg Gly Pro Arg Ser Leu Arg Gly Arg Asp Ala Pro Ala Pro  
1 5 10 15

Thr Pro Cys Val Pro Ala Glu Cys Phe Asp Leu Leu Val Arg His Cys  
20 25 30

Val Ala Cys Gly Leu Leu Arg Thr Pro Arg Pro Lys Pro Xaa Ala Gly  
35 40 45

Ala Ser Ser Pro Ala Pro Arg Thr Ala Leu Gln Pro Gln Glu Ser Val  
50 55 60

Gly Ala Gly Ala Gly Glu Ala Ala Leu Pro Leu Pro Gly Leu Leu Phe  
65 70 75 80

Gly Ala Pro Ala Leu Leu Gly Leu Ala Leu Val Leu Ala Leu Val Leu  
85 90 95

Val Gly Leu Val Ser Trp Arg Arg Arg Gln Arg Arg Leu Arg Gly Ala  
100 105 110

Ser Ser Ala Glu Ala Pro Asp Gly Asp Lys Asp Ala Pro Glu Pro Leu  
115 120 125

Asp Lys Val Ile Ile Leu Ser Pro Gly Ile Ser Asp Ala Thr Ala Pro  
130 135 140

Ala Trp Pro Pro Pro Gly Glu Asp Pro Gly Thr Thr Pro Pro Gly His  
145 150 155 160

Ser Val Pro Val Pro Ala Thr Glu Leu Gly Ser Thr Glu Leu Val Thr  
165 170 175

Thr Lys Thr Ala Gly Pro Glu Gln Gln  
180 185

<210> 28  
<211> 175  
<212> PRT  
<213> Mouse

<400> 28

Met Gly Ala Arg Arg Leu Arg Val Arg Ser Gln Arg Ser Arg Asp Ser  
1 5 10 15

Ser Val Pro Thr Gln Cys Asn Gln Thr Glu Cys Phe Asp Pro Leu Val  
20 25 30

Arg Asn Cys Val Ser Cys Glu Leu Phe His Thr Pro Asp Thr Gly His  
35 40 45

Thr Ser Ser Leu Glu Pro Gly Thr Ala Leu Gln Pro Gln Glu Gly Ser  
50 55 60

Ala Leu Arg Pro Asp Val Ala Leu Leu Val Gly Ala Pro Ala Leu Leu  
65 70 75 80

Gly Leu Ile Leu Ala Leu Thr Leu Val Gly Leu Val Ser Leu Val Ser  
85 90 95

Trp Arg Trp Arg Gln Gln Leu Arg Thr Ala Ser Pro Asp Thr Ser Glu  
100 105 110

Gly Val Gln Gln Glu Ser Leu Glu Asn Val Phe Val Pro Ser Ser Glu  
115 120 125

Thr Pro His Ala Ser Ala Pro Thr Trp Pro Pro Leu Lys Glu Asp Ala  
130 135 140

Asp Ser Ala Leu Pro Arg His Ser Val Pro Val Pro Ala Thr Glu Leu  
145 150 155 160

Gly Ser Thr Glu Leu Val Thr Thr Lys Thr Ala Gly Pro Glu Gln  
165 170 175